

A World's Record for Utah Copper

A MILLION a week!"

This is the new slogan of the Utah Copper company of Bingham.

A million what? Oh, just dollars—dollars that support five thousand working people and their dependents, that add to the incomes of investors in every part of the world, that sustain scores of business enterprises and contribute to the public revenues in cities, counties, states and nation.

When the war-plagued world sent out a call for copper, copper and still more copper the Utah company was producing from seven to thirteen million pounds of the metal monthly. Its highest output for any one month was 13,768,958 pounds, in July, 1914. That was considered phenomenal. Nearly seven thousand tons a month, or 230 tons a day! The world had never seen anything like it from a single mine.

It was conceded that Utah Copper might stretch this output a little, but the experts thought the tonnage was pretty close to the maximum.

The armies kept on shooting. The central powers melted up the saucepans in family kitchens and the Allies consumed all the copper in the warehouses. The cry for "more copper" became louder and stronger. The Utah Copper company put on more men and shovels and raised its monthly production to fourteen and then to sixteen million tons.

The munitions factories at home and abroad were casting shells for the Verdun defense and the Somme drive. Their requirements outstripped the efforts of the copper miners. "More copper!" bellowed Mars.

To all appearances the copper mines of the world had reached their limit. Utah Copper, the biggest of them all, had increased by three million pounds its highest previous record.

Then the master magicians of the Utah Copper staff—D. C. Jackling and R. C. Gemmell—came upon the scene. Under the spell of their necromancy the output grew in July, 1916, to 20,000,000 pounds a month, fifty per cent higher than the production which amazed all Copperdom two years before. And those who think this achievement has exhausted the arts of the magicians do not realize the extent of their powers. Wiser observers know that they are equal to any emergency and that appeals for "more copper" will not be made to them in vain.

Translated into monetary terms 20,000,000 pounds of 25 per cent copper are \$5,000,000 and that is more than a "million a week," but the slogan is easy to remember and we may as well let it go at that until the earnings reach a million and a half a week.

Before discussing the financial aspect of the increased output it is worth while to touch on the manner in which the heads of the company transformed a 13,000,000-a-month into a 20,000,000-a-month producer.

It wasn't simply a matter of adding more steam shovels to the mine, more cars to the railroad and more units to the mills. The tonnage could have been increased in that way, but at enormous cost. Such methods would have served, perhaps, but they would have been the recourse of mediocrity; they would have lacked the spark of genius and failed of the wonderful results which gives the air of magic to the means actually employed.

When the extraordinary demand for copper subsides and the price of the metal seeks lower levels the Utah Copper will not be burdened with an accumulation of useless buildings and superfluous machinery left as mementoes of a transient need. The triumph of its magicians was in swelling the output without a corresponding increase

in the size of its plants. They solved the problem on the basis of efficiency instead of dimensions.

Instead of buying half again as many machines they got more work out of those already on the job. The mills were speeded to double their original rating and an auxiliary process was installed to prevent the losses which speed might be expected to entail.

Under the stress of necessity improvements and economies that normally would have been years in maturing, have been brought to perfection in a few months. Others, still more far-reaching in their effects, have been hastened along and are nearing completion.

In the first quarter of the year the gross production of copper was 36,564,533 pounds, an average of 12,188,177 pounds a month. For the third quarter it was 61,079,924 pounds, an average of 20,359,975 pounds monthly. To get its thirty-six million pounds in the first quarter the company treated 1,984,600 tons of crude ore having an average content of 1.4333 per cent copper; the sixty-one million pounds in the third quarter was extracted from 3,404,300 tons of ore of 1.4484 per cent grade.

The difference in the assays was only .302 of a pound of copper to the ton, but on the total tonnage for the quarter it amounted to 18,422,000 pounds worth at 25 cents a pound \$4,605,500.

It is these little differences that have made the Utah Copper the wonderful profit-maker it is today. It was to make these little differences that financiers, yielding to the unanswerable logic of D. C. Jackling's mathematical calculations, invested thirty million dollars to obtain the first dollar of profit and it was because the differences appeared so little that it took the public ten years to realize that Utah Copper stock was an investment of incomparable merit.

In the last month the stock has sold for much more than \$100 a share, giving the entire valuation of better than \$162,000,000. The dividends for 1916 will be \$19,493,880, or \$12 per share, equal to 12 per cent on \$100 stock. The net earnings will be much higher. In the third quarter of this year, after the dividend was paid, there was added to the net surplus \$7,175,990. This is equivalent to \$4.42 a share and would make the net earnings for the quarter \$7.42 a share, or at the rate of \$29.68 annually—practically 30 per cent on \$100 stock.

Where does all this money come from? Well, most of it is from 25% cents copper, that being a rough estimate of the average selling price for the year. During the third quarter it cost the company 6.322 cents a pound to produce its sixty-one million pounds. This includes smelter deductions. There is a prima facie profit of about 19 cents a pound. As this is written copper is quoted at 28 and a fraction which means a profit of 21 cents per pound, and refusals for spot copper at 35 cents being recorded.

It is scarcely to be expected that the red metal will remain at 28, or even at 25 cents a pound. If the European war continues for another year it may reach 30 or 35 cents, but any price above 18 or 20 cents is recognized as abnormal. What will happen to the earnings of Utah Copper when the price recedes?

You may be sure that men as long-headed as those who control the destinies of this company have taken thought for the morrow. If they can prevent it the profits will not fall back to the old level even when the extraordinary demand ceases. They do not believe that the demand will end with the war nor soon after. D. C. Jackling, the managing director of the company, said last June that if the present demand should continue the world would be facing a copper famine in less

than the average lifetime of a man. When the 30,000,000 men now engaged in war take up peaceful pursuits they will be unable to add to the present production of copper. They may be able to increase the production of other metals, but throughout the world at present practically every large copper producing company, as well as the smelters, is producing copper at capacity.

This limitation of supply coupled with the inevitable demand for reconstruction seems sure to prevent a precipitate fall of prices even on the restoration of peace. Before there is much of a drop in copper the prices of powder, machinery and equipment and the cost of living will decline, thus lowering the expense of metal production and compensating in a measure for lower metal prices.

The Utah Copper management, however, does not rely exclusively on economic laws for the perpetuation of its dividends. Readers of the newspapers are familiar with the fact that a leaching plant with a capacity of 2,500 tons of ore per day is under construction. At the smelter town Jarfield a chemical company is preparing to manufacture 100 tons of sulphuric acid daily from the by-products of the smelter which will be available for the leaching plant.

Piled around the Utah Copper mountain at Bingham are 40,000,000 tons of ore containing about 1 per cent copper. It was the "overburden" which was removed at great expense from the hill and thrown away because it was a carbonate and not amenable to concentration as practiced in the company mills.

A long series of experiments have shown that the metal in the carbonate ore can be extracted by leaching with sulphuric acid. With the acid obtainable at low cost the recovery can be made so cheaply as to yield a profit comparable with that on the sulphide ore treated in the mills.

Long before cessation of war demand begins to be felt the Utah Copper company will be extracting from its "waste," already broken and ready to be steam-shoveled into freight cars, a product which will go far toward offsetting a decline in the market value of copper.

Reports of the company show that the percentage of recovery in the company mills is from 61 to 63 per cent. This means that 37 to 39 per cent, or ten to twelve pounds in every ton, escapes in the tailings. The escape of these values used to worry the management considerably. It doesn't any more because the officials have discovered that the tailings themselves can be made to surrender the copper they contain by applying oil flotation.

This process is now used on the ore in the mill and the tailings are said to be so clean of values that they are kept separate from the older tailings created before the flotation department was installed. The old tailings ponds containing millions upon millions of tons of finely-ground material with a few pounds of copper to the ton will eventually be worked over at a profit of a few cents per ton.

"A few cents!" Before you scoff at the picaresqueness of the amount pause and remember that "a few cents" profit is the foundation of the huge earnings of this giant company and that "a few cents" additional profit on a ton of Utah Copper ore will extinguish "a few cents" loss in the selling price of copper and hold earnings and dividends to the present level even after the world returns to sanity and peace.

A further guarantee of the future is embodied in the cash surplus of the company, amounting now to about \$27,000,000 and the list of subsidiary mines and corporations which pay tribute to the master organization—the greatest copper mine in the world.